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(54) Title: **ALUMINA-COATED METAL STRUCTURE AND CATALYST STRUCTURE.**

(57) Abstract: A metal substrate is coated with a layer of ceramic, by spraying droplets of a slurry of a ceramic precursor onto the substrate, the substrate being at a temperature between 500 °C and 750 °C. The ceramic comprises alumina, and is made macroporous by spraying a mixture of alumina sol and alumina particles with no more than 35 % by weight of dispersible alumina. Spraying onto a red-hot surface in this fashion leads to a very marked improvement in adhesion of the resulting ceramic to the metal substrate. A catalytically active material may then be incorporated in the ceramic layer, so as to form a catalyst structure (16).

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